

To begin study for the upcoming two-day test and then the final, complete the following problems.

8-124; CL8-136; CL8-137; CL8-139;

9-25; 9-59; 9-62; 9-70; 9-71

10-44; 10-88; 10-182

11-51; 11-64; 11-62

12-25; 12-26; 12-57

Checkpoints 4, 6 which are in vol. 1

Checkpoints 7, 8 which are in vol. 2

*Students should be able to the following.....*

### Chapter 1:

- \*Identify a transformation
- \*Transform a shape on the coordinate plane
- \*Categorize shapes based on properties and symmetry
- \*Identify/Recognize relationship between perpendicular lines and their slope.
- \*Solve an equation, Order of operations, multiply binomials
- \*Find Area and Perimeter of a shape

## Chapter 2:

### \*Triangle Inequalities:

“Could the following sides form a triangle?”

“Range of possible answers for the missing third side of  $\triangle$ ”

### \*Pythagorean theorem (including real-world situations)

### \*Angle Relationships

Vertical Angles, Straight Angles, Alt. Interior Angles,  
Same-Side Interior Angles

### \*Triangle Angle Sum Theorem

### \*Area of a Triangle, Parallelogram, Trapezoid, Rectangle

## Chapter 3:

### \*Dilate a shape on the coordinate plane from a given point

### \*Use common ratios to find a missing side in similar figures

### \*Determine “IF” shapes are similar and Identify the rule:

$AA^\sim$ ,  $SAS^\sim$ ,  $SSS^\sim$

### \*Construct a formal proof (flow-chart) to prove Similarity

## Chapter 4:

### \*Draw a diagram and identify the “right triangle” in the Situation.

### \*Use the tangent ratio to find a missing side in a right triangle (including real-world situations)

## Chapter 5:

- \*Use sine, cosine, tangent and inverse trig functions to find missing sides and angles of right triangles.
- \*Find the slope angle using the tan ratio
- \*Find missing sides/angle in NON-RIGHT triangles using the Law of Sines and Law of Cosines

## Chapter 6:

- \*Identify/Recognize congruent  $\Delta$ s by:  
SSS, SAS, ASA, AAS, HL Congruency
- \*Construct a formal proof (flow-chart or 2-Column) to Prove  $\Delta$ s are congruent.
- \*Recognize and construct a formal proof to show  
 $\cong \Delta \rightarrow \cong \text{parts}$

## Chapter 7:

- \*Identify a given shape based on specific characteristics  
Or given info about the central angle  
“Must-Be/Could-Be” problems
- \*Analyze a shape on the coordinate plane focusing on the length and slope of sides and measures of angles.
- \*Find the coordinates of the Midpoint of a segment on the coordinate plane

\*Recognize/Identify/Apply the properties of special quadrilaterals: Parallelogram, Rhombus, Rectangle, Square, Kite, Right Trapezoid and Isosceles Trapezoid

\*Apply properties of the Midsegment of a Triangle